

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: LESTER L. HEWITT

AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.  
1177 WEST LOOP SOUTH, TENTH FLOOR  
HOUSTON, TEXAS 77027

RECEIVED

Akin, Gump, Strauss,  
Hauer & Feld, L.L.P.

AUG 0 1999

Docket by

Action

Date date

Date of Mailing  
(day/month/year)

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

04 AUG 1999

Applicant's or agent's file reference

A97139WO

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.

PCT/US99/03888

International filing date  
(day/month/year)

24 FEBRUARY 1999

Applicant

WILLIAMS TOOL COMPANY, INC.

- 1.
- ☒
- The applicant is hereby notified that the international search report has been established and is transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.**Where?** Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

- 2.
- ☐
- The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

- 3.
- ☐
- With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

- 4.
- Further action(s):**
- The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later):

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

HOANG DANG

Telephone No. (703) 308-2168

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# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: LESTER L. HEWITT  
AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.  
1177 WEST LOOP SOUTH, TENTH FLOOR  
HOUSTON, TEXAS 77027

## PCT

### NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

<p>Date of Mailing (day/month/year) <b>04 AUG 1999</b></p>	
<p>Applicant's or agent's file reference <b>A97139WO</b></p>	<p><b>FOR FURTHER ACTION</b> See paragraphs 1 and 4 below</p>
<p>International application No. <b>PCT/US99/03888</b></p>	<p>International filing date (day/month/year) <b>24 FEBRUARY 1999</b></p>
<p>Applicant <b>WILLIAMS TOOL COMPANY, INC.</b></p>	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.  

**Filing of amendments and statement under Article 19:**  
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO  
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For more detailed instructions, see the notes on the accompanying sheet.
2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
  - ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
  - ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4. **Further action(s):** The applicant is reminded of the following:

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Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

<p>Name and mailing address of the ISA/US  Commissioner of Patents and Trademarks  Box PCT  Washington, D.C. 20231</p>	<p>Authorized officer <i>H. Leon Meunier</i>  <b>HOANG DANG</b></p>
<p>Facsimile No. (703) 305-3230</p>	<p>Telephone No. (703) 308-2168</p>

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference A97139WO	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5
International application No. PCT/US99/03888	International filing date (day/month/year) 24 FEBRUARY 1999	(Earliest) Priority Date (day/month/year) 02 MARCH 1998
Applicant WILLIAMS TOOL COMPANY, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I).
2. ☐ Unity of invention is lacking (See Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
  - ☐ filed with the international application.
  - ☐ furnished by the applicant separately from the international application,
    - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
  - ☐ transcribed by this Authority.
4. With regard to the title,
  - ☒ the text is approved as submitted by the applicant.
  - ☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
  - ☐ the text is approved as submitted by the applicant.
  - ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:  
Figure No. 11
  - ☒ as suggested by the applicant.
  - ☐ because the applicant failed to suggest a figure.
  - ☐ because this figure better characterizes the invention.

☐ None of the figures.

## Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

The abstract is too long (PCT Rule 8.1(b)). The abstract must be less than 150 words, or 200 words when no Figure is to be published.

## NEW ABSTRACT

An apparatus for controlling a subsea borehole fluid pressure is proposed for use with a conductor casing (110) positioned below the mudline (SF) and within a normal pore pressure environment. The apparatus includes a pump (53) for moving a fluid through a tubular into a borehole. The fluid, before being pumped, exerts a pressure less than the pore pressure of an abnormal pore pressure environment (10). The fluid in the borehole is then pressurized by the pump (53) to at least a borehole pressure equal to or greater than the pore pressure of an abnormal pore pressure environment (10). A pressure housing assembly (15) allows for the drilling of a borehole below the conductor casing (110) into an abnormal pore pressure environment (53) while maintaining the pressurized fluid between a borehole pressure equal to or greater than the pore pressure of the abnormal pore pressure environment (10), and below the fracture pressure of the abnormal pore pressure environment (10).

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/03888

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : E21B 7/12, 21/10, 21/12

US CL : 175/7, 214, 215

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 175/5, 7, 214, 215

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	✓ US 5,662,181 A (WILLIAMS et al) 02 September 1997 (02/09/97), see figure 3.	4,5,7,8,10,11
Y	✓ US 3,827,511 A (JONES) 06 August 1974 (06/08/74), see column 1, lines 11-45.	1-8,10-16
Y	✓ US 4,355,784 A (CAIN) 26 October 1982 (26/10/82), see column 1, lines 6-51.	4,5,7,8,10,11
Y	✓ US 4,157,186 A (MURRAY et al) 05 June 1979 (05/06/79), see column 4, lines 51-55.	11
Y	✓ US 3,638,721 A (HARRISON) 01 February 1972 (01/02/72), see figures 2-3.	1-8,10-16
Y	✓ US 4,046,191 A (NEATH) 06 September 1977 (06/09/77), see column 1, lines 12-53.	1-8,10-16



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

24 JUNE 1999

Date of mailing of the international search report

04 AUG 1999

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/03888

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<input checked="" type="checkbox"/> US 4,046,191 A (NEATH) 06 September 1977 (06/09/77), col. 1, lines 12-53.	1-8,10-16
A	<input checked="" type="checkbox"/> US 4,149,603 A (ARNOLD) 17 April 1979 (17/04/79), see the entire patent.	1-18